

CLAIMS

What is claimed is:

1. A display with reduced moiré comprising:
 - a lenticular screen;
 - a projector configured to project a plurality of pixels onto the screen; and
 - an actuator configured to cause displacement of the projection of the pixels to reduce moiré on the lenticular screen.
2. The display of claim 1 wherein the screen includes a front and a back and the projector is configured to project the plurality of pixels onto the back of the screen for display on the front of the screen.
3. The display of claim 1 wherein the screen includes a front and the projector is configured to project the plurality of pixels onto the front of the screen for display on the front of the screen.
4. The display of claim 1 wherein the projector includes a plurality of micro-mirrors configured to convey the plurality of pixels as an image onto the screen and the actuator includes a vibrator linked to at least one of the micro-mirrors.
5. The display of claim 1 wherein the projector includes a positioning mirror and the actuator includes a vibrator linked to the positioning mirror.
6. The display of claim 1 further including a frequency controller configured to regulate the actuator.
7. The display of claim 6 wherein the frequency controller is configured to regulate the actuator with an irregular frequency.

8. The display of claim 1 further including a magnitude controller configured to regulate the actuator.

9. The display of claim 8 wherein the magnitude controller is configured to regulate the actuator with an irregular magnitude.

10. The display of claim 1 further including a direction controller configured to regulate the actuator.

11. The display of claim 10 wherein the direction controller is configured to regulate the actuator with an irregular direction.

12. The display of claim 1 wherein the lenticular screen includes a pitch and further including a screen pitch sensor and a pixel projection pitch controller configured to align the pixel projection pitch with the pitch of the lenticular screen.

13. The display of claim 1 wherein the lenticular screen has a plurality of lenses and the displacement of the projection is the size of less than one lens.

14. The display of claim 1 wherein the displacement of the projection is the size of less than one pixel.

15. A display with reduced moiré comprising:
a lenticular screen;
a projector configured to project a plurality of pixels onto the screen; and
means for disturbing at least a portion of the projector to cause displacement of the projection of the pixels to reduce moiré on the lenticular screen.

16. The display of claim 15 wherein the screen includes a front and a back and the projector is configured to project the plurality of pixels onto the back of the screen for display on the front of the screen.

17. The display of claim 15 wherein the screen includes a front and the projector is configured to project the plurality of pixels onto the front of the screen for display on the front of the screen.

18. The display of claim 15 wherein the projector includes a plurality of micro-mirrors configured to convey the plurality of pixels as an image onto the screen and the means for disturbing includes means for vibrating at least one of the micro-mirrors.

19. The display of claim 15 wherein the projector includes a positioning mirror and the means for disturbing includes means for vibrating the positioning mirror.

20. The display of claim 15 further including means for regulating the frequency of the displacement.

21. The display of claim 20 wherein the means for regulating the frequency includes means for regulating the actuator with an irregular frequency.

22. The display of claim 15 further including means for regulating the magnitude of the displacement.

23. The display of claim 22 wherein the means for regulating the magnitude includes means for regulating the actuator with an irregular magnitude.

24. The display of claim 15 further including means for regulating the direction of the displacement.

25. The display of claim 24 wherein the means for regulating the direction includes means for regulating the actuator with an irregular direction.

26. The display of claim 15 wherein the lenticular screen includes a pitch and further including means for aligning the pixel projection pitch with the pitch of the lenticular screen.

27. The display of claim 15 wherein the lenticular screen has a plurality of lenticules and the displacement of the projection is the size of less than one lenticule.

28. The display of claim 15 wherein the displacement of the projection is the size of less than one pixel.

29. A method for reducing moiré comprising:
projecting a plurality of pixels onto a back of a lenticular screen;
and
disturbing the projection to cause displacement of the pixels to reduce moiré.

30. The method of claim 29 further including regulating the frequency of the displacement.

31. The method of claim 30 wherein regulating the frequency includes regulating the displacement with an irregular frequency.

32. The method of claim 29 further including regulating the magnitude of the displacement.

33. The method of claim 32 wherein regulating the magnitude includes regulating the displacement with an irregular magnitude.

34. The method of claim 29 further including regulating the direction of the displacement.

35. The method of claim 34 wherein regulating the direction includes regulating the displacement with an irregular direction.

36. The method of claim 29 further including aligning the pixel projection pitch with a pitch of the lenticular screen.

37. The method of claim 36 wherein aligning further includes sensing the location of the pixel projection pitch and the pitch of the lenticular screen.

38. The method of claim 36 wherein aligning further includes directing the disturbing based on the location of the pixel projection pitch relative to the pitch of the lenticular screen.

39. A program storage system readable by a computer, tangibly embodying a program, applet, or instructions executable by the computer to perform method steps for reducing moiré, the method comprising:

projecting a plurality of pixels onto a lenticular screen; and
disturbing the projection to cause displacement of the pixels to reduce moiré.

40. The program storage system of claim 39 further including regulating the frequency of the displacement.

41. The program storage system of claim 40 wherein regulating the frequency includes regulating the displacement with an irregular frequency.

42. The program storage system of claim 39 further including regulating the magnitude of the displacement.

43. The program storage system of claim 42 wherein regulating the magnitude includes regulating the displacement with an irregular magnitude.

44. The program storage system of claim 39 further including regulating the direction of the displacement.

45. The program storage system of claim 44 wherein regulating the direction includes regulating the displacement with an irregular direction.

46. The program storage system of claim 39 wherein the lenticular screen has a pitch and the program storage system further includes aligning the pixel projection pitch with the pitch of the lenticular screen.

47. The program storage system of claim 46 wherein aligning further includes sensing the location of the pixel projection pitch and the pitch of the lenticular screen.

48. The program storage system of claim 46 wherein aligning further includes directing the disturbing based on the location of the pixel projection pitch relative to the pitch of the lenticular screen.